ABSTRACT OF THE DISCLOSURE

An apparatus of WRR (Weighted Round-Robin) cell scheduling for ATM comprises: a virtual connection queues for storing the cells of virtual connection having a weight given by a natural number N; scheduling weight queues having a weight given by a power of 2 for servicing the virtual connection by as much as its weight N; a scheduling weight queue controller for selecting the scheduling weight queues for the virtual connection queue and register the virtual connection queue in the selected scheduling weight queues; and a queue selector for selecting the scheduling weight queues .